

27 September 1957

MEMORANDUM FOR: Mr. Frederick T. Merrill
East-West Contacts Staff
Department of State

SUBJECT: Views of IAC Ad Hoc Committee on Exchanges relative to the
25X1X1 [REDACTED] Implications of the Soviet Proposal for
Long Term (3-6 Months) Exchanges in Stated Fields

Introduction

1. This memorandum considers whether the Soviet proposal would lead to
25X1X1 net [REDACTED] advantage to the US, weighing 25X1X1 [REDACTED] gain to the US
against the [REDACTED] gain, plus the technological gain, to the USSR. 25X1X1
These terms are used in the sense defined in the original IAC-D-103 of
February 1956, and employed in our papers to you since that time. As in the
past, we have not undertaken to consider [REDACTED] or other 25X1X1
aspects of the proposal. Moreover, our assessments of [REDACTED] gain in 25X1X1
this paper take account solely of [REDACTED] obtained, on both sides, by 25X1X1
overt observation. The potential [REDACTED] 25X1X1
[REDACTED] is being separately 25X1X1
assessed by the Director of Central Intelligence in appropriate coordination
with the intelligence community.

2. This paper examines, first, the general effect of the proposed
long-term exchange basis, as compared with the shorter term exchanges
(generally 4-6 weeks in duration) that have previously been conducted and
considered. Next, the paper takes up the specific fields suggested by the
Soviets, with brief evaluations of each. Lastly, the paper takes up in
greater detail a selection of fields -- three named in the Soviet list,
three not so named -- which, in our judgment, would produce net [REDACTED] 25X1X1
gain, to the greatest degree, to the US if undertaken on the long-term basis.

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I. GENERAL DISCUSSION

3. The effect of a long-term, as opposed to a short-term, exchange basis varies enormously from case to case, so that generalization is loose at best. In the majority of cases, our evaluation indicated that the long-term basis would not tend greatly to increase US [REDACTED] gain; however, there are 25X1X1 conspicuous exceptions, such as railroads discussed in Section III, where US 25X1X1 [REDACTED] gain would be enormously increased. As to Soviet [REDACTED] gain, again in a majority of cases there would be no great increase, although there are a few cases where there would be major increases.

4. The major factor affected by the long-term basis is, in general, that of Soviet technological gain. In many fields, such gain would be very greatly increased by the extended opportunity to observe US production practices and to have personal relationships with US technicians and scientists. It has been our assessment, in most past cases, that the US literature -- widely translated and read in the USSR -- has given the Soviets a good external picture of how US industry works and of many of our key processes and developments. It is in the application of these processes, and particularly the "know-how" element, that the Soviets are far less clear. There have been indications, moreover, that the exchanges conducted so far have been unsatisfactory to them in this respect, at least in some cases. Hence, this may well be a major element in their present proposal, that they hope to make a great increase in their technological gain. (Their hopes and our assessments may not, of course, agree in individual cases.)

5. Balancing these factors to arrive at a conclusion regarding "net [REDACTED] advantage" to the US, we can say that:

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a. As a very general rule, the Soviet gains tend to increase more than US gains, on the long-term, as opposed to the short-term, basis.

b. In many individual fields, however, the net ^{25X1X1} [REDACTED] advantage to the US continues to exist, either because the gains balance out, or balance in the US favor, or because any change in Soviet favor arising from the long-term basis is not sufficient to cancel out the previous conclusion.

^{25X1X1} Hence, from an [REDACTED] standpoint, acceptance of the Soviet proposal as a universal basis for exchanges would clearly be undesirable. At the same time, acceptance -- or US initiative -- in selected fields could have net ^{25X1X1} [REDACTED] advantage, so that the ^{25X1X1} [REDACTED] angle does not argue for wholesale rejection of the Soviet proposal, but rather for selective acceptance, perhaps using favorable fields for trial while maintaining the short-term basis for most cases.

6. In its look at the various possible fields, the Committee has given much attention to the problem of enlisting the support of US industry for visits on the long-term basis. We believe that in a number of fields it will be exceedingly difficult to get US industry to spare for 3-6 month periods the top-flight men who would be best qualified as observers. This both affects ^{25X1X1} our [REDACTED] gain estimates and opens the possibility of embarrassment to the Department through use of unqualified delegations or even failure to fill a project. Hence, this factor argues also far at most a highly

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selective acceptance of the long-term basis. (A related point is the willingness of US industry to accept long-term visits by the Soviets. This, too, may present difficulties, but we think generally less acute.)

II. FIELDS PROPOSED BY SOVIETS

7. The Soviet listing of fields is obviously loose and would require sharpening in any event. In some cases, such as "chemicals", it is clearly too broad for a single project and must be considered by compartments. In defining the fields for purposes of this evaluation, we have made what we think is a reasonable guess of what they may have in mind, and gone on from there.

8. A listing of the fields, with some detailed discussion, is found in Annex A. Broadly speaking, we conclude that:

a. Long-term exchanges could (often under defined conditions only) produce [REDACTED] advantage to the US in the following 25X1X1 fields:

Petroleum, electric power, some chemicals, radio engineering and electrical.

b. Long-term exchanges would probably produce [REDACTED] 25X1X1 disadvantage to the US in the following fields:

Mining, metallurgical, some chemicals and farm machinery.

c. The balance is slight in either direction in the following fields:

Coal, building construction, machine tools, automobiles.

d. Instrument construction and means of automation are such complex subjects that further analysis will be necessary before determination can be made.

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III. FIELDS FOR POSSIBLE US ACCEPTANCE OR INITIATIVE

9. For this section, we have selected for detailed analysis three fields from the Soviet list, and have added three projects not on the Soviet list. We believe, that to the degree and in the manner indicated below, each of these projects would produce [REDACTED] advantage to the US to the greatest 25X1X1 extent. Among the fields discussed in this section we have not attempted a precise priority listing; in general, however, we consider that the petroleum project should be considered at the top.

10. The priority suggestions are:

OIL - In this case an industry panel was consulted. The suggestion is that the limit be two months for the initial exchange. On this basis we consider it to be a substantial net US advantage proposition. Here in particular it could be said that after the two industries become acquainted they may find areas of interest justifying longer visits. The 23 August 1957 memorandum to you from the Committee Secretary outlined sponsorship negotiation considerations. The industrial panel reaffirmed those suggestions and added the suggestion that the full details of the proposal should be given in the initial letter of the American Petroleum Institute. These details can be supplied in short order if necessary.

RAILROAD TRANSPORTATION AND EQUIPMENT - The Committee put forward a proposal on 1 June 1956 outlining an exchange in this field. That proposal pointed out the many areas of possible [REDACTED] gain stemming from the 25X1X1 fact that experienced railroad observers have not visited the USSR since the 1930's and the importance of railroads to the transportation system of the USSR. The Committee feels that the original proposal could be expanded to cover a three months' period with substantial intelligence gain to the US in both the operating and equipment fields. (It is worth noting that although

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the Soviets covered most of US industry in their proposal, no element of transportation was included). Details on itinerary and delegation composition suggestions can be worked out in a hurry if necessary. A 23 August 1957 memorandum to you from the Secretary of this Committee outlined the history of negotiations with the suggested sponsor, the Association of American Railroads. We feel that the suggestion, that an approach to the top level of that organization would be well received, is still valid as a necessary preliminary to advanced planning in the Railroad Exchange. Our technical consultants will be available for substantive support.

RADIO ENGINEERING AND ELECTRICAL (INCLUDING ELECTRIC POWER) - In this case, again with strong urging to plan carefully and supervise closely, it is believed that a large US net advantage can be obtained. Short term proposals in telecommunications, electric power and electronics have been forwarded and can be expanded. In this case the industry has more experience than any other and has indicated a willingness to cooperate further. Eminent men and companies seem willing and anxious to cooperate because of a feeling that they have something to learn. The specialists suggest that, while the electrical and radio industries may show profits from a six month exchange, electric power be limited to three months.

HIGHWAY ENGINEERING - This is another transportation field previously suggested for a short term exchange which can be profitably expanded. Here the cold weather operations are a Soviet specialty that are of interest to the US. The opportunity to take more time to cover the territory adds value. It is urged that for staffing reasons and in respect for weather conditions, the limit be set at three summer months.

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SHIPBUILDING - The previous Shipbuilding Exchange proposal was in two parts --- Theoretical and Practical. The Committee feels that the Practical Shipbuilding Exchange advantage to the US is enhanced by a longer time period. We would like to withdraw even the Theoretical Shipbuilding Exchange Proposal submitted on 17 June 1956. Subsequent developments have rendered it obsolete.

11. The Committee also considered the possibility of a long-term exchange in the fields of banking and economic planning. In the course of this consideration the specialists involved developed the idea that the most fruitful activity from a long-term advantage point of view would be an exchange of students and faculty between Soviet and US academic institutions and private research organizations in the field of economics. It is estimated that this would establish a professional rapport which would pay off in our increased understanding of vital Soviet economic concepts, measurements, and policy directions. It is strongly urged that in your negotiations of student exchanges this proposal be given high consideration.

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ANNEX A

These fields were considered by the Committee and assigned as either US advantage, USSR advantage or a balanced situation.

1. US Advantage

Chemical - This category covers many different industries covering the full range of sensitivity and even in those cases where a net advantage is possible, careful attention must be given to the details of the visits. In the fields of nitrogen compounds, fluorine compounds, electrothermal and electrolytic chemical industries, a net gain is probable. Conversely in fields such as petrochemicals, synthetic fibres and much of plastics, the Soviet technological gain would outweigh the US gain. In any case nothing longer than three months should be considered

Civil Air - This is a strong US advantage situation; the fact that State Department does not wish to negotiate with Civil Air routes at present eliminates this from immediate consideration.

2. USSR Advantage

Mining and Metallurgical - The specialists believe that on the basis of present knowledge the increase in Soviet technological gain involved in a long term exchange over a short term one will throw the net advantage to the Soviets. They suggest that

- a. The Soviets be asked to supply a list of installations comparable to those they wish to visit
- b. A reassessment of the long term situation be made with industry assistance after the short term visit.

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Heavy Machinery and Farm Machinery - In contrast to the situation in the automobile industry, the Soviets could utilize the technological gain from a long term exchange so readily that the US would be at a net disadvantage here.

3. Balanced

Coal - In this case if full USSR industry data were made available to the US team, the visit would at best be neutral.

Automobile - Because of the fact that the Soviets are many years away from the high volume production necessary to maintain the technological processes, they could not take maximum technical advantage of the long term opportunity. The US gain increase would also be slight so the case is a standoff.

Machine Tool - While the chance for worthwhile US 25X1X1
[REDACTED] gain is excellent, the Soviet technological gain situation looks bad on a long term basis and this is a balance.

Building Construction - The gains seem to be balanced in this case also. The USSR technological gains in heavy industry and housing construction would balance the US [REDACTED] gains. There are other 25X1X1
construction fields such as communications and hydro that would be of more value to the US.

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